



THE SMART CULTIVATOR

SOIL VARIETY CONFIGURATION GUIDE





WHY CONFIGURE YOUR MACHINE?



Soil types can differ significantly from one field to another. Whether the soil is **cloddy, sandy, mucky, etc.**, configuring your Smart Cultivator correctly is crucial for effective weeding. This guide will assist you in setting up your Smart Cultivator to achieve optimal results.





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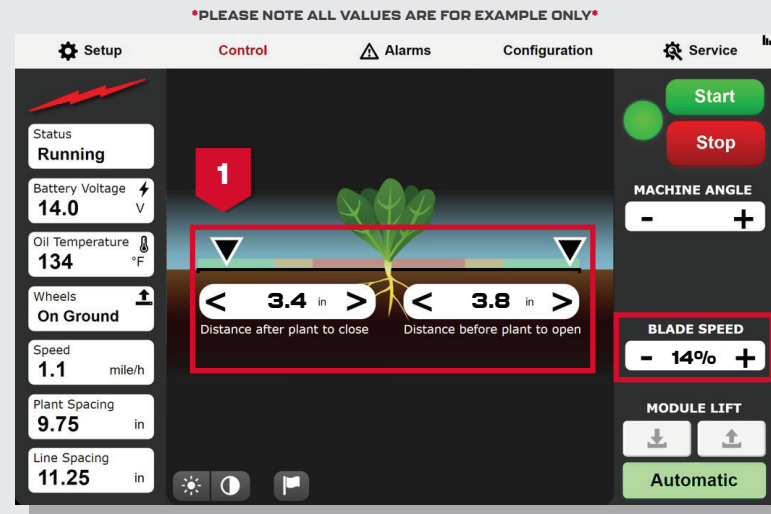
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CLODDY SOIL

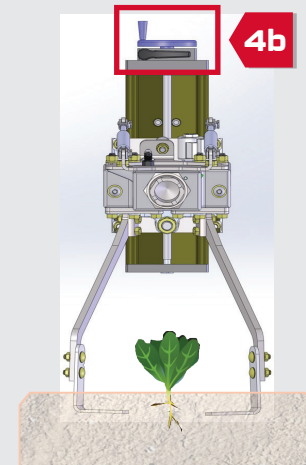


WHAT TO LOOK FOR:

- Clods pushing into plant
- Clods covering plant
- Clod preventing actuators blades from proper ground depth
- Oscillating backbones due to dirt clods

STOUT RECOMMENDATIONS

1. Increase opening and closing distance around the plant
2. Reduce the blade speed percentage
3. Reduce the tractor speed
- 4a. Deepen blade depth to get under the clods
- 4b. Manually turn Z-table to adjust depth

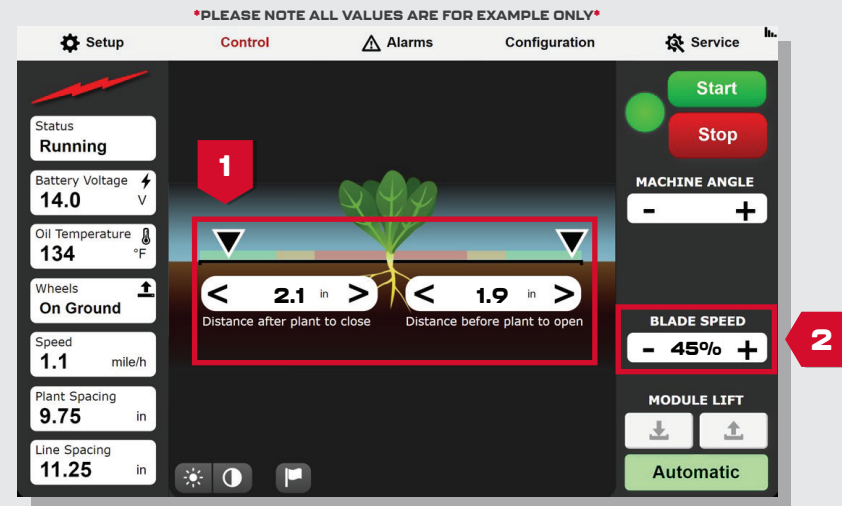


LIGHT SANDY SOIL



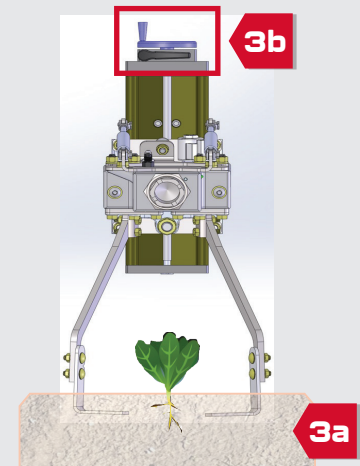
WHAT TO LOOK FOR:

- Dirt tossed on plant
- Dirt covering plant

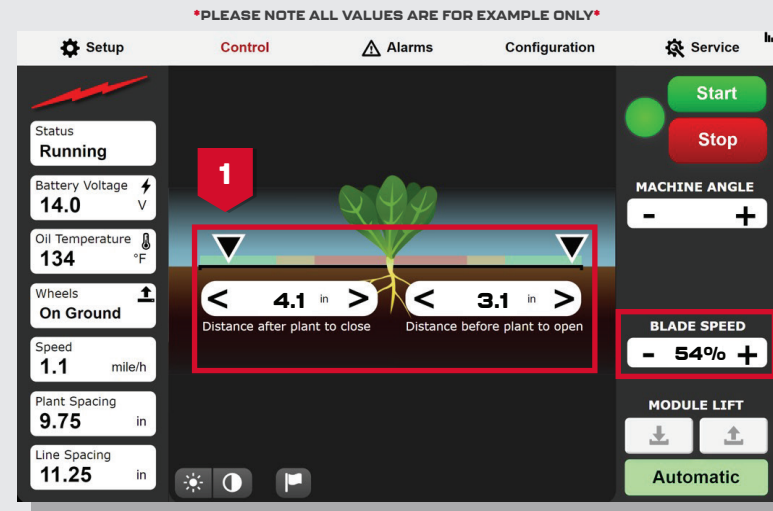


STOUT RECOMMENDATIONS

1. Decrease opening and closing distance around plant
2. Moderate tractor speed
- 3a. Shallow blade depth
- 3b. Manually turn Z-table to adjust depth



HARD TOP CRUST SOIL

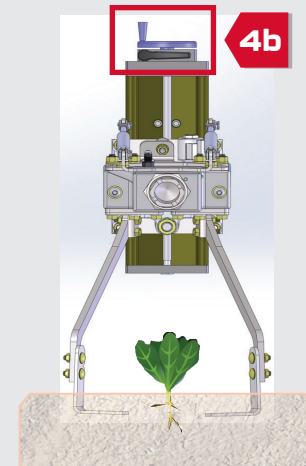


WHAT TO LOOK FOR:

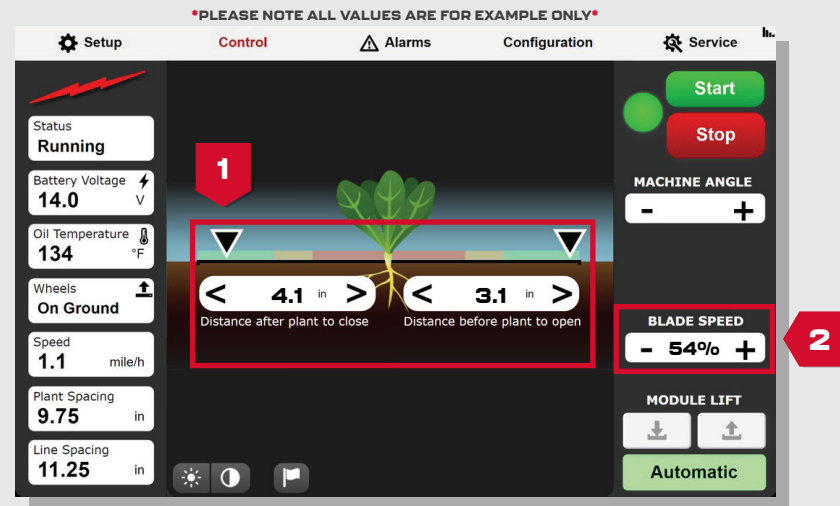
- Crust pushing into plant
- Crust covering plant
- Crust preventing blades from proper depth
- Crust wear on equipment
- Oscillating backbones due to crust

STOUT RECOMMENDATIONS

1. Increase opening and closing distance around plant
2. Increase blade speed to break up crust
3. Slower tractor speed
- 4a. Shallow blade depth
- 4b. Manually turn z-table to adjust depth



MUCK SOIL

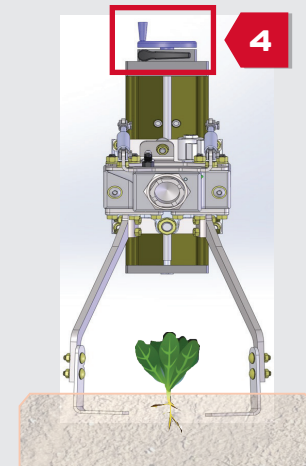


WHAT TO LOOK FOR:

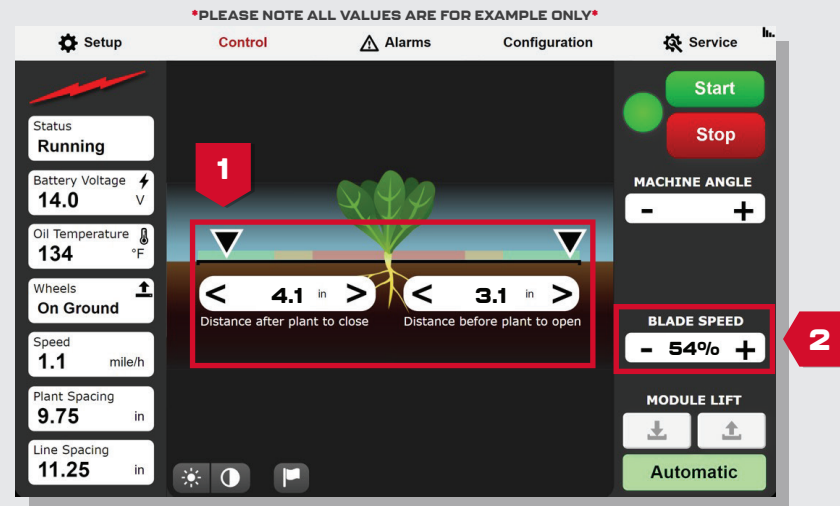
- Muck soil pushing into plant
- Muck soil covering plant
- Muck build up on cultivation knives
- Backbones sinking due to soft ground
- Muck sticking to Ground Height Wheel
- Dragging weeds causing build up

STOUT RECOMMENDATIONS

1. Increase opening and closing distance around plant
2. Increase blade speed to prevent soil from sticking to knives
3. Reduce tractor speed
4. Manually turn z-table to adjust depth



HEAVY WEED SOIL



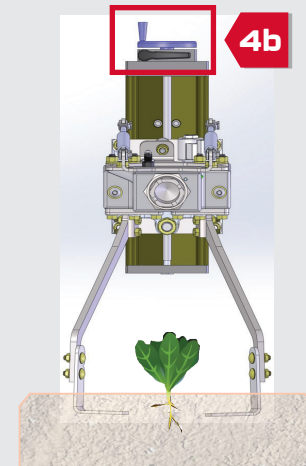
WHAT TO LOOK FOR:

- Weeds covering plants
- Weeds getting stuck to blades
- Weeds being dragged potentially damaging plants
- Debris stuck to blades



STOUT RECOMMENDATIONS

1. Increase opening and closing distance around plant
2. Increase blade speed
3. Reduce tractor speed
- 4a. Shallow blade depth to prevent weeds from sticking to blades
- 4b. Manually turn z-table to adjust depth



WHEN NOT TO ENTER FIELD **STOUT** RECOMMENDATIONS

WET / DAMP CONDITIONS



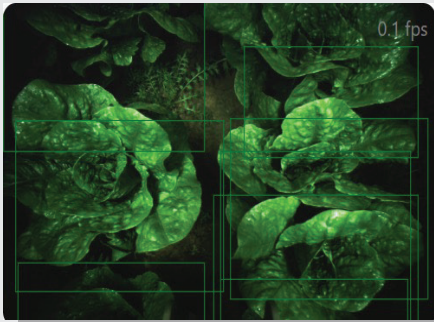
Smart Cultivator will sink, causing plowing and crop kills. Mud build up on wheel encoder will cause inconsistent wheel rotation not allowing actuators to open and close properly.

PLANT SIZE LESS THAN 2" IN DIAMETER



Entering the field when plants are this young will cause crop kills due to dirt covering plants.

OVERLAPPING CROP



Plant leaves overlapping and touching will not allow blades to close in between plants. Generally, at this stage, vision system cannot distinguish individual plant.

EXTREME WEED PRESSURE



Vision system will not detect plant if weed pressure is covering plant. This will cause actuators to stay closed, thus causing crop kills.